BUNDESREPUBLIK DEUTSCHLAND

Prioritätsbescheinigung über die Einreichung einer Patentanmeldung

Aktenzeichen: 102 42 350.4

Anmeldetag: 12. September 2002

Anmelder/Inhaber: Boehringer Ingelheim Pharma GmbH & Co KG, Ingelheim/DE

(vormals: Boehringer Ingelheim Pharma KG)

Bezeichnung: Heterocyclisch substituierte Indolinone, ihre Herstellung und ihre Verwendung als Arzneimittel

IPC: C 07 D 209/34

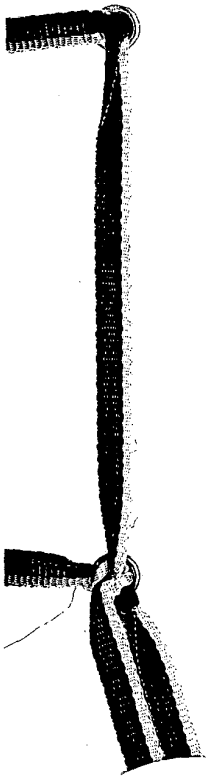
Die angehefteten Stücke sind eine richtige und genaue Wiedergabe der ursprünglichen Unterlagen dieser Patentanmeldung.

München, den 16. Juli 2003
Deutsches Patent- und Markenamt
Der Präsident
Im Auftrag

A 9161
02/00
EDV-L

BUNDESREPUBLIK DEUTSCHLAND

Prioritätsbescheinigung über die Einreichung einer Patentanmeldung



Aktenzeichen: 102 52 969.8

Anmeldetag: 14. November 2002

Anmelder/Inhaber: Boehringer Ingelheim Pharma GmbH & Co KG, Ingelheim/DE

(vormals: Boehringer Ingelheim Pharma KG)

Bezeichnung: Heterocyclisch substituierte Indolinone, ihre Herstellung und ihre Verwendung als Arzneimittel

IPC: C 07 D 405/06

Die angehefteten Stücke sind eine richtige und genaue Wiedergabe der ursprünglichen Unterlagen dieser Patentanmeldung.

München, den 16. Juli 2003
Deutsches Patent- und Markenamt
Der Präsident
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Boehringer Ingelheim Pharma KG
D-55216 Ingelheim

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Indolinones substituted by heterocycles, the preparation thereof and their use as medicaments

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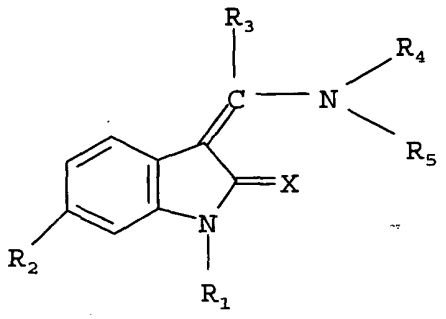
The present invention relates to new heterocyclically substituted indolinones of general formula



(I),

the tautomers, diastereomers, enantiomers and mixtures thereof, the prodrugs thereof and the salts thereof, particularly the physiologically acceptable salts thereof which have valuable properties.

The above compounds of general formula I have valuable pharmacological properties, in particular an inhibiting effect on various kinases, especially receptor tyrosine kinases such as VEGFR1, VEGFR2, VEGFR3, PDGFRα, PDGFRβ, FGFR1, FGFR3, EGFR, HER2, IGF1R and HGFR, as well as complexes of CDKs (Cyclin Dependent Kinases) such as CDK1, CDK2, CDK3, CDK4, CDK5, CDK6, CDK7, CDK8 and CDK9 with their specific cyclins (A, B1, B2, C, D1, D2, D3, E, F, G1, G2, H, I and K) and on viral cyclin (cf. L. Mengtao in J. Virology 71(3), 1984-1991 (1997)), and on the proliferation of cultivated human cells, in particular endothelial cells, e.g. in angiogenesis, but also on the proliferation of other cells, in particular tumour cells.

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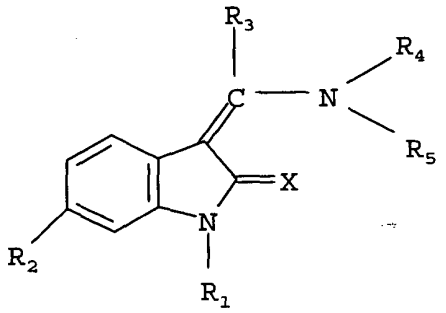

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